



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,902	08/28/2006	Takashi Akaba	062790	4368
38834 7590 01/26/2010 WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP 1250 CONNECTICUT AVENUE, NW SUITE 700 WASHINGTON, DC 20036				
EXAMINER NGUYEN, HUNG D				
ART UNIT 3742		PAPER NUMBER		
NOTIFICATION DATE 01/26/2010		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentmail@whda.com

Office Action Summary

Application No.

10/590,902

Applicant(s)

AKABA ET AL.

Examiner

HUNG NGUYEN

Art Unit

3742

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-5, 7 and 8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-5, 7 and 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 December 2009 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-06)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/28/2009 has been entered.
2. This office action is responsive to the amendment filed on 12/28/2009. As directed by the amendment: claim 7 has been canceled and new claim 8 has been added. Thus, claims 2-6 and 8 are presently pending in this application.

Claim Objections

3. Claim 2 is objected to because of the following informalities: "travelling" which appears to be a misspelling of a word "traveling". Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2-4 and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oki (JP 53115640) (newly cited) in view of Wegener (US Pat. 6,601,426) (Previously cited).
6. Oki discloses an apparatus for improving residual stress of piping, the T-piping comprising a first piping 2 (Fig. 2 below) having one end welded and connected to a tubular circumferential surface of a second piping 1 (Fig. 2 below), and comprising: a circumferential-direction position adjusting structure for moving the welding head 6 (fig. 2 below) along a circumferential direction about a tubular axis of the first piping 2 (Circular axis of pipe 2, Fig. 2 below); a tubular axial-direction position adjusting structure for moving the welding head 6 (Fig. 2 below) along a tubular axial direction of the first piping (Vertical axis of pipe 2, Fig. 2 below); a radial-direction position adjusting structure for moving the welding head 6 (Fig. 2 Below) along a radial direction of the first piping (Horizontal axis of pipe 2, Fig. 2 below); wherein the circumferential-direction position adjusting structure includes a rail mounted 5 (Fig. 2 below) on a surface of the first piping 2 (Fig. 2 below), wherein the rail 5 (Fig. 2 below) includes a ring shape surrounding a periphery of the first piping 2 (Fig. 2 below), and wherein the circumferential-direction position adjusting structure further includes a cart (Fig. 2 below) traveling on the ring-shaped rail 5 (Fig. 2 below) as a track.

Oki does not disclose irradiating an outer surface of a T-piping with a laser beam emitted from a laser head and an emission-direction adjusting structure for changing an emission direction of the laser beam in a plane including the tubular axis of the first piping, by changing a direction of the laser head; and a second emission-direction

adjusting structure for changing the emission direction of the laser beam in a plane intersecting the plane including the tubular axis of the first piping, by changing the direction of the laser head.

Wegener discloses a laser emitter 28 (Fig. 1) serves as the welding head (Par. 3, Lines 33-38) and the laser head can rotate around axis y, z, D, 54a and 54 (Fig. 3; Col. 6, Lines 55-64).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize in Oki, improving residual stress of piping, which irradiates an outer surface of a T-piping with a laser beam emitted from a laser head and an emission-direction adjusting structure for changing an emission direction of the laser beam in a plane including the tubular axis of the first piping, by changing a direction of the laser head; and a second emission-direction adjusting structure for changing the emission direction of the laser beam in a plane intersecting the plane including the tubular axis of the first piping, by changing the direction of the laser head, as taught by Wegener, for the purpose of preventing stress-corrosion-cracking at the T-piping connection.

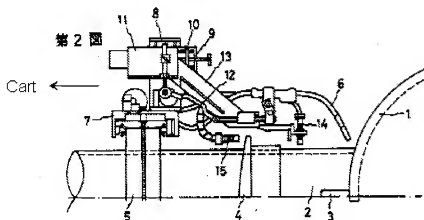


Fig. 2

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oki (JP 53115640) in view of Wegener (US Pat. 6,601,426) in view of Schadler (US Pat. 6,825,438) (Previously cited).

8. Regarding claim 5, Oki/Wegener discloses substantially all features of the claimed invention as set forth above except for the plurality of the laser heads are provided in a laser head support portion. Schadler discloses plurality of the laser heads are provided in a laser head support portion (Fig. 1). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize in Oki/Wegener, the plurality of the laser heads are provided in a laser head support portion, as taught by Schadler, for the purpose of welding multi-parts at one welding station.

9. Applicant's arguments with respect to claims 2-7 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUNG NGUYEN whose telephone number is (571)270-7828. The examiner can normally be reached on Monday-Friday, 9M-6PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tu Hoang can be reached on (571)272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/HUNG NGUYEN/
Examiner, Art Unit 3742
1/12/2010

/Quang T Van/
Primary Examiner, Art Unit 3742